

ABSTRACT

An analog to digital conversion (ADC) circuit is disclosed including a fully differential reference voltage source. The reference voltage source includes a programmable current supply adapted to drive a programmed current through a resistor so as to establish an initial reference voltage. The initial reference voltage is sampled onto a capacitive network during a first sampling time interval. The capacitive network is coupled to a differential input of a fully differential amplifier, and maintained at a differential output of the differential amplifier during a second output time interval. An output coupling between the differential output and differential input of the differential amplifier acts to maintain stability of the output voltage during the output time interval.